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EXAMINER

TRINH, S

ART UNIT

PAPER NUMBER

2681

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/042,951

Applicant(s)

KIM CHANG et al.

Examiner

Sonny Trinh

Group Art Unit

2681



☒ Responsive to communication(s) filed on Aug 4, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

- ☒ Claim(s) 1-30 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1, 2, 4-10, 12-20, 22-25, and 27-30 is/are rejected.
- ☒ Claim(s) 3, 11, 21, and 26 is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over Shirai (Shirai; U.S. Patent number 6,104,924).

As to **claim 1**, Shirai discloses a virtual terminal protocol for a mobile station and a fixed station which initializes the mobile station by transmitting from the fixed station a terminal capabilities inquiry, transmitting from the mobile station a terminal capabilities in response to the terminal capabilities inquiry, transmitting from the fixed station in text messages a selected plurality of scripts (parameters) in response to the terminal capabilities response, and storing in the mobile station the scripts (parameters) transmitted by the fixed station. The protocol provides for mobile station originated script action in which a script is invoked at the mobile station, which involves the display of menu options and the selection by a user of one of those options. The protocol also provides for fixed station originated script action in which the fixed station transmits a script invocation request

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to the mobile station and the mobile station invokes a script in response to the script invocation request (abstract, columns 4-6). As for the customer service center, a mobile switching center a base station controller and the base transceiver stations, these sub-units are necessary for a wireless communication system to operate and are inherent in a wireless communication network. Therefore, it would have been obvious for a person skilled in the art at the time the invention was made to include a customer service center, a mobile switching center, a base controller and a base transceiver stations in order to obtain the invention as specified in claim 1 in order to have a wireless communication system compatible with the rest of the network and to allow the customer to use his / her mobile terminal at its maximum capabilities.

3. **Claims 2, 4-6, 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shirai (Shirai; U.S. Patent number 6,104,924) in view of Lupien (Lupien; U.S. Patent number 6,006,091).

As to **claim 2**, Shirai discloses the invention except for the response message further includes an analog cellular band, a digital cellular band and the personal communication service band. In an analogous art, Lupien discloses a method in a cellular telecommunications network of informing the network of a plurality of operating capabilities of a mobile terminal. The method begins with the steps of entering an access (intermediate) state at the mobile terminal and then transmitting a message from the network to the mobile terminal (establishing a communication path between a mobile telephone and the over the air function) requesting the mobile terminal to transmit information regarding the operating capabilities of the mobile terminal (abstract). Lupien further discloses the network or MSC transmits a request over the air to a mobile telephone to interrogate said mobile telephone's protocol

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capability (figures 1-2, column 4, line 52 to column 5, line 7). In response to a detection of said request, the mobile terminal responds with a protocol capability response message over the air (column 6, lines 30-67, table 1). Lupien further discloses the terminal capabilities supported by the mobile terminal (columns 5-8, tables 1-3) including the different bands such as analog, digital, PCS (column 1). Therefore, it would have been obvious for a person skilled in the art at the time the invention was made to combine Shirai and Lupien in order to obtain the invention as specified in claim 1. The motivation for combining would be to allow the base station to provision all the features that the mobile station supports in order to use the mobile terminal at its maximum capabilities.

As to **claim 4-6**, Lupien further discloses the network or MSC transmits a request over the air to a mobile telephone to interrogate said mobile telephone's protocol capability (figures 1-2, column 4, line 52 to column 5, line 7). In response to a detection of said request, the mobile terminal responds with a protocol capability response message over the air (column 6, lines 30-67, table 1). Lupien further discloses the terminal capabilities supported by the mobile terminal (columns 5-8, tables 1-3). Therefore, it would have been obvious for a person skilled in the art at the time the invention was made to combine Shirai and Lupien in order to obtain the invention as specified in claim 4. The motivation for combining would be to allow the base station to provision all the features that the mobile station supports in order to use the mobile terminal at its maximum capabilities.

As to **claim 5**, Lupien further discloses the different service options that are available to the mobile telephone (tables 1-2, column 7, line 64 to column 8, line 49).

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As to **claim 6, 22**, Shirai further discloses the over-the-air function uses the contents of the protocol capability response message to provision services for said mobile telephone (columns 4-5, abstract).

4. **Claims 7, 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shirai (Shirai; U.S. Patent number 6,104,924), Lupien (Lupien; U.S. Patent number 6,006,091) and in further view of Cropper (Cropper; U.S. Patent number 5,819,178).

As to **claims 7 and 23**, the combination of Shirai and Lupien discloses the invention except for the SERVICE OPTION field is utilized to initiate an appropriate provisioning of the Home Location Register (HLR). In an analogous art, Cropper discloses the methods and apparatus for accessing subscriber information in interconnected wireless telecommunications networks, Cropper further discloses that the HLR database includes subscriber data for mobile terminals provisioned on the first wireless network (Fig. 2, column 4, lines 19-34, claims 13-14). At the time of the invention, it would have been obvious for a person skilled in the art to combine Shirai, Lupien and Cropper to obtain the invention as claimed in claims 7 and 23; the motivation / suggestion for doing so would be to let the network know what kind of services the mobile station is capable of handling in order to better service it.

As to **claim 8**, Shirai further discloses the mobile telephone communication network may be a code division multiple access (CDMA) network (column 1).

As to **claims 9-10, 12-16**, these claims merely reflect the apparatus to the method claim of claim 1-2, 4-8 (respectively) and are therefore rejected for the same reasons.

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As to **claims 17-20**, the combination of Shirai, Lupien and Cropper also set forth the mobile telephone aspect of claims 1-2, 4-5 respectively and are therefore rejected for the same reasons.

As to **claims 24-25, 27-30**, these claims merely reflect the method claim to the apparatus claim of claims 17-18, 19-20, 22-23 (respectively) and are therefore rejected for the same reasons.

Allowable Subject Matter

5. **Claims 3, 11, 21, and 26** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to **claims 3, 11, 21 and 26**, the prior art of record disclosed numerous examples of over-the-air programming and service provisioning but failed to disclose or fairly suggested the specific combination and structural as set forth in claims 3, 11, 21 and 26, specifically the operational parameters include a preferred roaming list and a number assignment module indicator block that were selected by over the air function based upon the band and mode capabilities of said mobile telephone's band and mode capabilities.

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Conclusion

6. Applicant's arguments with respect to **claims 1-20** have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire **THREE MONTHS** from the date of this action. In the event a first response is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than **SIX MONTHS** from the date of this final action.

8. **Any response to this final action should be mailed to:**

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-6306, (for formal communications intended for entry)

Or:

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(703) 308-6296 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonny Trinh whose telephone number is (703) 305-1961. The examiner can normally be reached on Tuesday-Friday from 7:00 a.m to 4:30 p.m. The examiner can also be reached on alternate Fridays.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Sonny Trinh S.T.
October 13, 2000


DWAYNE BOST
SUPERVISORY PATENT EXAMINER
GROUP 2600